

SECTION 1.10 ENVIRONMENTAL COMPLIANCE

1.10.01--General: This Section of the Standard Specifications for Roads, Bridges and Incidental Construction is provided to identify those construction activities or other activities under the Department's control or jurisdiction which may have a negative effect on the environment, including the State's native waters and natural resources, and to prevent or minimize any damage to the environment which might result from such activities, both during and following the completion of any transportation Project.

The Contractor shall be bound to comply with all requirements of permits and permit applications, as though the Contractor were the permittee. If at the time the permit is received, its contents differ from that which is outlined in the application, the permit shall govern. Should the permit be received after the receipt of bids and the permit requirements significantly change the character of the work, adjustment will be made to the Contract in accordance with the appropriate articles in Section 1.04. The requirements and conditions set forth in the permit and permit application shall be binding on the Contractor just as any other specification would be.

This Section reinforces those environmental protection requirements which the Contractor is bound to meet under the terms of the Contract, or under Federal or State laws and regulations. If a Contractor fails to comply with environmental provisions of the Contract or law, the Contractor shall be penalized as provided in this Section and as provided elsewhere in this Contract.

1.10.02--Compliance With Laws and Regulations: The Contractor shall at all times conduct his operations in conformity with all Federal and State permit requirements concerning water, air, or noise pollution or the disposal of contaminated or hazardous materials. Permit requirements include, but are not limited to those established by federal regulations administered by the United States Coast Guard and the U.S. Army Corps of Engineers.

Appropriate permits shall be required for all activities associated with or incidental to the Contractor's operations including, but not limited to, those on the Project site and in all adjacent areas, waste and disposal areas, borrow and gravel banks, storage areas, haul roads, access roads, detours, field offices, and any other temporary staging areas. The Contractor shall be responsible for, and hold the State harmless from, any penalties or fines which may be assessed by any authority due to the Contractor's failure to comply with the terms of all applicable permit requirements.

The Department will submit all applications and obtain all permits required for Contract work within the limits shown on the plans or identified elsewhere in the Contract documents.

Any request by the Contractor for authorization of activities or methods not specifically called for by the Contract, plans, applications submitted or applicable permits issued for the Project must be submitted by the Contractor in writing to the Engineer, and must include a detailed description of the proposed activities or methods, the justification for those activities and supporting documentation showing that the proposed activity or method will not create risks of damage to the environment. If such proposal is accepted by the Engineer, the Department will process an application to the appropriate regulatory agency or agencies for any permit amendment, modification, revision or new permit required for the Contractor to carry out the additional activities or implement the changed methods on the Project. The Department does not, however, guarantee that it will be able to obtain the desired permit amendment, modification or revision, and the Department will not be liable for the effects of any inability to do so. No extension of time will be granted as a result of the Contractor's request to perform work not authorized as part of the established permit requirements. If the amendment, modification, or revision of the permit is not necessary for the Contractor to perform the work as required by the original Contract or as subsequently ordered by the Engineer, then no claim may be made by the Contractor based on the amount of time taken by the Department to review the Contractor's proposal, or to apply for or secure the permit amendment, modification or revision. No such proposed additional activity shall commence, nor shall such a changed method be implemented until and unless the Engineer approves in writing the Contractor's request.

In case of failure on the part of the Contractor to perform pollution control work as determined by the Engineer, the Engineer may, upon 24 hours written notice, arrange for the performance of the work by approved forces and the cost thereof will be deducted from any monies due or which may become due the Contractor under the Contract or under

any other State contract.

1.10.03--Water Pollution Control: (a) The Contractor shall, throughout the life of the contract, control and abate siltation, sedimentation and pollution of all waters, under ground water systems, inland wetlands, and tidal, coastal or navigable waters for work appearing on the plans. Temporary construction methods proposed by the Contractor shall also conform to all application or permit requirements. The Contractor shall assume responsibility for all obligations and costs incurred under the terms and conditions of such permit applications or permits.

The Contractor shall obtain any permits and pay any fees required for the performance of work which is not included in the original Contract or which is to be done outside the Project limits but which is proposed in the fulfillment of his Contract obligations including, but not limited to, the removal of material from, deposition of materials in, obstruction of, construction within, alteration or pollution of any inland wetland, tidal wetland, coastal or navigable water, streams, ponds, lakes, water supplies or other water bodies.

(b) The following items may be superseded by specific permits from DEP. The Contractor shall not make any design changes in the Contract work which requires a variance from the requirements of the following items until and unless the Contractor has first submitted a detailed written proposal for such changes to the Engineer for review by the Department and for transmittal to and review by the DEP, and then received written approval from the Department of the proposed variances.

BEST MANAGEMENT PRACTICES

1. No construction shall proceed until erosion and sedimentation control plans, prepared by the Contractor, have been submitted in writing and approved by the Engineer, and until such controls have been installed as the Engineer directs. Such plans shall be consistent with the Connecticut Council On Soil & Water Conservation document "Connecticut Guidelines for Soil Erosion and Sediment Control," as revised, which is available from DEP, and with the Department document "On Site Mitigation for Construction Activities," as revised.
2. Refueling of equipment or machinery within 8 m of any wetland or watercourse shall be allowed only with the approval of the Engineer.
3. No construction shall proceed until a written proposal of methods to prevent construction debris, paint, spent blast materials, or other materials from entering the wetland or watercourse has been submitted by the Contractor to the Engineer and approved by the Engineer, and such methods have been implemented as the Engineer directs. These materials shall be collected and disposed of in an environmentally safe manner in accordance with all applicable Federal and State laws and regulations. The Engineer may order the Contractor to cease such activity temporarily if, in the judgement of the Engineer, wind or storm conditions threaten to cause the deposit of such materials into a waterway.
4. No materials resulting from construction activities shall be placed in or allowed to contribute to the degradation of an adjacent wetland or watercourse. Disposal of any material shall be in accordance with Connecticut General Statutes, including, but not limited to, Sections 22a-207 through 22a-209.
5. Forging of streams with equipment shall be prohibited, except as approved by the Engineer. Such equipment travel shall be minimized. Where frequent equipment travel on stream banks and beds is necessary, washed stone shall be placed to minimize erosion, scour, and turbidity, provided no significant grade change will be required for any haul road or temporary structure placed in wetlands or watercourses in accordance with provisions established under Section 1.10.02.
6. All off-site disposal locations for material and debris resulting from the progress of the Project shall be submitted in writing to the Engineer who shall determine whether or not they are acceptable. The Contractor shall ensure that these locations are outside of designated wetlands or watercourses, unless otherwise approved by local, state, or federal agencies with jurisdiction over the matter.

7. A construction sequencing plan and a water handling plan including a contingency plan for flood events must be submitted in writing to the Engineer and approved by the Engineer prior to the commencement of any construction in a waterway. Water shall be kept deep enough in the channel to allow for the passage of fish and the continuous flow of the watercourse as required by the Engineer.
8. When dewatering is necessary, pumps shall not discharge directly into the wetland or watercourse. Prior to dewatering, the Contractor must submit to the Engineer a written proposal for specific methods and devices to be used, and obtain the Engineer's approval of such methods and devices to be used for dewatering activities, including, but not limited to, pumping the water into a temporary sedimentation bowl, providing surge protection at the inlet and outlet of pumps, or floating the intake of the pump, or other methods to minimize and retain the suspended solids. If the Engineer determines that the pumping operation is causing turbidity problems, said operation shall cease until such time as a means of controlling turbidity is submitted by the Contractor, approved by the Engineer and implemented by the Contractor.
9. Work within or adjacent to watercourses shall be conducted during periods of low flow, whenever possible. The Engineer shall remain aware of flow conditions during the conduct of such work, and shall cause such activity to cease should flow conditions threaten to cause excessive erosion, siltation or turbidity. The Contractor shall make every effort to secure the work site before predicted major storms. A major storm shall be defined as a storm predicted by NOAA Weather Service with warnings of flooding, severe thunderstorms, or similarly severe weather conditions or effects.
10. All temporary fill shall be stabilized during use to prevent erosion and shall be suitably contained to prevent sediment or other particulate matter from reentering a wetland or watercourse. All areas affected by temporary fills must be restored to their original contours or as directed by the Engineer, and revegetated. The areal extent of temporary fill or excavation shall be confined to that area necessary to perform the work, as approved by the Engineer.
11. Seeding is to be accomplished within 7 days of the Contractor's reaching an appropriate grading increment as determined by the Engineer. If the Engineer anticipates and notifies the Contractor, or if the Contractor intends, that a grading operation will be suspended for a period of 30 or more consecutive days, the Contractor shall, within the first 7 days of that suspension period, accomplish seeding, or take such other appropriate measures to stabilize the soil as may be required by the Engineer.
12. Dumping of oil, chemicals or other deleterious materials on the ground is forbidden. The Contractor shall provide a means of catching, retaining, and properly disposing of drained oil, removed oil filters, or other deleterious material. All spills of such materials shall be reported immediately by the Contractor to the DEP.
13. No application of herbicides or pesticides within 8 m of any wetland or watercourse will be allowed. All such applications must be done by a Connecticut licensed applicator. The Contractor shall submit to the Engineer the proposed applicator's name and license number, and must receive the Engineer's approval of the proposed applicator, before such application is carried out.
14. During spawning seasons, as defined in the Contract, discharges and construction activities in spawning areas of State Waters shall be restricted so as not to disturb or inhibit aquatic species which are indigenous to the waters.

If the Contractor wants to make changes in construction operations or scheduling which would affect the use of or necessity for any pollution controls, before beginning to implement those changes it must submit a written proposal detailing them to the Engineer, and must receive the Engineer's approval of those changes. As part of its submission the Contractor must submit a plan showing what erosion and sedimentation controls above and beyond those called for in the plans and specifications would be necessitated by the changes it proposes to make in the sequence or nature of Project construction activities and related operations.

The Contractor shall inspect temporary and permanent erosion and sedimentation controls immediately after each rainfall and at least daily during prolonged rainfall. The Contractor shall maintain all erosion and sedimentation control devices in a functional condition in accordance with the document "Connecticut Guidelines for Soil Erosion and Sediment Control," as revised, and the Department's document "On Site Mitigation for Construction Activities," as revised. In the event the Contractor fails to maintain such devices in accordance with such documents, and the Contractor does not correct those failures within 24 hours after receipt of written notice of such failures from the Engineer, the Department may proceed with its own or other forces to remedy specified failure and the cost thereof will be deducted from monies due the Contractor under the Contract or under any other State contract.

1.10.04--Air Quality Control: The Contractor shall exercise every reasonable precaution throughout the life of the Contract to safeguard the air resources of the State by controlling or abating air pollution in accordance with the DEP's regulations. These measures shall include the control and abatement of dust, mist, smoke, vapor, gas, aerosol, other particulate matter, odorous substances or any combination thereof arising from construction operations, hauling, storage, or manufacture of materials.

1.10.05--Noise Pollution: The Contractor shall take measures to control the noise intensity caused by his construction operations and equipment, including but not limited to equipment used for drilling, pile driving, blasting, excavation or hauling.

All methods and devices employed to minimize noise shall be subject to the continuing approval of the Engineer. The maximum allowable level of noise at the nearest residence or occupied building shall be 90 decibels on the "A" weighted scale (dBA). Any operation that exceeds this standard will cease until a different construction methodology is developed to allow the work to proceed within the 90 dBA limit.

1.10.06--Protection of Archaeological and Paleontological Remains and Materials: The Contractor shall be alert to the likelihood that, during the prosecution of the work, archaeological or paleontological remains and materials which may be of significance in recording the historic and prehistoric past may be uncovered. When archaeological or paleontological remains are uncovered, the Contractor shall immediately halt operations in the discovery location and shall notify the Engineer. The Contractor shall make every effort to preserve archaeological or paleontological remains intact in their original positions in order to preserve the archaeological or paleontological importance of materials in relation to one another and to the enclosing soil.

The Engineer shall have the authority to suspend the work for the purpose of preserving, documenting and recovering the remains and materials of archaeological or paleontological importance for the State. The Contractor shall carry out all instructions of the Engineer for the protection of archaeological or paleontological remains, including steps to protect the site from vandalism and unauthorized investigations, from accidental damage and from dangers such as heavy rainfall or runoff. The Contractor shall reschedule its work to minimize the loss of time in completing the Project while the State evaluates, records and salvages the archaeological or paleontological information and materials.

Extra work ordered by the Engineer in this connection will be paid for in accordance with Articles 1.04.05 and 1.09.04. Enforced delays caused by archaeological or paleontological preservation and protection, which the Contractor demonstrates have delayed completion of the Project, will be treated under the provisions for extension of time, Article 1.08.08.

1.10.07--Contaminated and/or Hazardous Material: The Department will acquire any "Hazardous Waste Generator Permit(s)" required under the Resource Conservation and Recovery Act, for the management and disposal of all contaminated and/or hazardous material known to exist or discovered during construction operations, provided that:

1. such material is within the construction limits defined in the Contract, and;
2. such material is not comprised of waste materials generated by the Contractor.

If the Department has defined an area of known or suspected contamination within the Project limits, and if contaminated material in that area has not been removed prior to the start of the Project, the disposition of such material shall be arranged for with an appropriate party.

In the event that the Contractor encounters or exposes any material, not previously known or suspected to be contaminated, but which exhibits abnormal properties which may indicate the presence of hazardous or contaminated material, the Contractor shall cease all operations in the vicinity of the abnormal condition, and the Engineer shall be notified immediately. The presence of barrels, discolored earth, metal, wood, visible fumes or smoke, abnormal odors or excessively hot earth may indicate the presence of hazardous or contaminated material, and shall be treated with extreme caution. The proper disposition of the material shall be arranged for with an appropriate party.

Unless otherwise provided for under a specific Contract item, direct Contractor involvement with hazardous or contaminated materials, other than those associated with Contract operations, is neither required nor solicited under this Contract.

When the Contractor performs support work incidental to the removal, treatment or disposal of hazardous or contaminated material, payment will be made at the unit prices for applicable pay items in the Contract. When the Contract does not include appropriate pay items, payment will be made in accordance with Article 1.04.05 - Extra Work.

The Contractor shall faithfully observe all security precautions established pursuant to OSHA 29 CFR 1919.120, including all revisions and amendments, and shall not work in any area known to contain or suspected of containing hazardous or contaminated material without prior written approval of the Engineer.

The Contractor will assume sole responsibility for the proper storage, handling, management and disposal of all regulated materials and wastes associated with the Contractor's operations, including, but not limited to; lubricants, antifreeze, engine fluids, paints, and solvents. All costs associated with the Contractor's failure to properly manage such materials in accordance with federal and state regulations, and all remedial and punitive costs incurred by the Department as a result of such failure will be borne by the Contractor.

Excluded from the requirements under this article are coatings removed by the Contractor for the purpose of painting structural steel or other steel elements. The debris resulting from paint removal shall be tested by the Department to determine whether or not it is contaminated or hazardous material. Once so tested, these materials shall be removed from the site and disposed of by the Contractor in accordance with applicable special provisions.